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Inventor, Patent Number, Country Author, Title, Name of Document	Publication Date (day/month/year)	Concise Explanation of the Relevance (indication of page, column, line figure of the relevant portion)
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(54) OPTICAL REPEATER SYSTEM

(57) Abstract:

PURPOSE: To increase a main signal and a supervisory system signal at a high gain altogether by connecting a high diffusion optical fiber to both input and output terminals of a repeater and applying Raman amplification in forward and reverse directions with a pump wave from the repeater in the region of the high diffusion optical fiber respectively.

CONSTITUTION: An optical input signal to a repeater 1 is inputted while being subject to Raman amplification at an optical coupler CPL1 with a pump wave from a laser diode LD1. Then the output of the optical coupler CPL1 is branched at a beam splitter BS to monitor the power of optical input and converted into an electric signal at an optoelectric conversion section O/E1 and a supervisory section SV supervises the power level. Then the optical output from an optical coupler CPL2 is subject to Raman amplification at an optical coupler CPL3 by using a pump light of a laser diode LD3 controlled by the supervisory section SV and send to a high diffusion optical fiber 3.